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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,148	02/09/2007	Michael E. Nanna	047.00063 (RFT-118)	8925
7590 11/09/2010				
Peter Rogalskyj Roglskyj & Weyand PO Box 44 Livonia, NY 14487-0044			EXAMINER FLETCHER III, WILLIAM P	
			ART UNIT 1715	PAPER NUMBER
			MAIL DATE 11/09/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/579,148

**Applicant(s)**

NANNA ET AL.

**Examiner**

William P. Fletcher III

**Art Unit**

1715

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 August 2010.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-49 is/are pending in the application.  
4a) Of the above claim(s) 35-49 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3, 5-20 and 30-34 is/are rejected.  
7) ☒ Claim(s) 21-29 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/14/07  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of claims 1-34 in the reply filed on 31 August 2010 is acknowledged. The traversal is on the ground(s) that examination of both inventions does not place an undue burden on the Primary Examiner. This is not found persuasive because the burden on the Primary Examiner extends to the patentability issues associated with, and evolving as a result of, searching additional inventions. Issues related to a coating process are frequently very different from those related to a coating composition. For example, the issues related to the structural requirements or synthesis requirements of a coating composition need not be familiar to an examiner of specific processes. Furthermore, as stated in the Office action, Applicant's right to rejoinder requires that the *product* (i.e., composition) claims be elected (which is not the case in the instant application) *and* that "[a]ll claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined." In their current form, the independent claims read:

A method of treating an aluminum or an aluminum alloy metal to improve the metal's corrosion resistance, said method comprising: applying, to the surface of the metal, a coating which comprises magnesium powder and a binder.

A coating composition comprising: magnesium powder; and a silane modified epoxy isocyanate hybrid polymer or prepolymer.

Consequently, it is clear that *even if* the composition claim had been elected (which it was not) and *if* said claim were allowable (which it has not been established to be), the non-elected process claim still does not contain all of the limitations thereof and

rejoinder would not be possible. This analysis further underscores the Primary Examiner's position that there are different issues associated with each invention and that it is very likely further, different issues would evolve during prosecution, thereby imposing an undue burden on the Primary Examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 35-49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 31 August 2010.

3. The Primary Examiner did not require an election of species.

***Information Disclosure Statement***

4. The IDS filed 14 February 2007 has been considered.

***Drawings***

5. The drawings were received 12 May 2006; they are acceptable.

***Specification***

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: METHOD OF APPLYING A MAGNESIUM-CONTAINING POWDER TO THE SURFACE OF AN ALUMINUM OR ALUMINUM ALLOY SUBSTRATE.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 11 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Both of these claims recite *from about 70 microns* which is indefinite since no upper limit is specified and which fails to further limit the claim from which it depends, which recites a range of 65-75 microns.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-3, 5-8, and 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wurbs et al. (US 2,933,400 A) or Parson et al. (US 4,083,726 A);

each in view of Gros (WO 2003/089529 A1; reference made to US 2005/0161641 A1 as the English-language equivalent).

- A.
  - i. Wurbs teaches a process for providing a metal substrate with a rust-prevention coating comprising magnesium powder in a binder [1:15-18 and 1:60-2:68]. On the subject of chromium, the reference is silent; which the Primary Examiner interprets as a fair teaching that the rust-prevention coating of this reference contains no chromium at all. With specific respect to claim 17, it is the Primary Examiner's position that the disclosure of a varnish binder anticipates the claimed polymeric binder.
  - ii. Parson teaches a process for providing a metal substrate with a corrosion-protecting coating [abstract and 1:11-16]. The coating comprises a polymeric organic binder [2:30-46] and powdered magnesium [3:43-46]. Inclusion of chromates is optional, with several non-chromium alternatives clearly taught [3:13-3:42].
- B. Neither Wurbs nor Parson expressly teaches that the metal substrates are the claimed aluminum or aluminum alloys.
- C. Gros teaches that aluminum and aluminum alloy surfaces may be protected against corrosion by application of a magnesium powder in a binder [0017, 0091].
- D. Consequently, it would have been obvious to one skilled in the art to apply the compositions of Wurbs and Parson to an aluminum or aluminum alloy substrate in order to impart corrosion protection thereto. With specific

respect to claims 6-8, it is the Primary Examiner's position that by virtue of the fact that the claimed copper-containing aluminum alloys are corrosion-susceptible, it would have been further obvious to one skilled in the art to apply the compositions of Wurbs and Parson thereto for the same reason.

12. Claims 1-3, 5-8, 17, 30, and 31, are rejected under 35 U.S.C. 103(a) as being unpatentable over McKaveney et al. (US 4,360,384 A) in view of Gros (WO 2003/089529 A1; reference made to US 2005/0161641 A1 as the English-language equivalent).

- A. McKaveney teaches a process for providing a metal substrate with a corrosion-protection coating [abstract]. The coating comprises powdered magnesium in a cross-linked polymeric binder that may include silicates [3:5-6:60]. With specific respect to claims 30 and 31, this reference discloses various magnesium alloys, including those comprising magnesium and manganese.
- B. McKaveney does not expressly teach that the metal substrates are the claimed aluminum or aluminum alloys.
- C. Gros teaches that aluminum and aluminum alloy surfaces may be protected against corrosion by application of a magnesium powder in a binder [0017, 0091].
- D. Consequently, it would have been obvious to one skilled in the art to apply the composition of McKaveney to an aluminum or aluminum alloy substrate in order to impart corrosion protection thereto. With specific

respect to claims 6-8, it is the Primary Examiner's position that by virtue of the fact that the claimed copper-containing aluminum alloys are corrosion-susceptible, it would have been further obvious to one skilled in the art to apply the composition of McKaveney thereto for the same reason.

13. Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parson alone in view of Gros or, in the alternative, Wurbs or McKaveney et al. in view of both Parson and Gros.

A. The teachings of Parson, Wurbs, McKaveney, and Gros, are detailed above.

B. None of these references expressly teaches the claimed size and amount of powdered magnesium. Parson teaches that these are result-effective variables affecting not only the corrosion-resistance of the coating but the overall cost of the coating process [3:44-47 and 4:6-20]. Additionally, it is the Primary Examiner's position that these are result-effective variables because they also affect the coating characteristics of the composition as well (viscosity, for example). Consequently, it is the Primary Examiner's position that it would have been obvious to one of ordinary skill in the art to modify the process of any one of Parson, Wurbs, or McKaveney, in order to optimize such a result-effective variables by routine experimentation absent evidence of criticality [MPEP 2144.05].

14. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wurbs, Parson, or McKaveney, each in view of Gros, additionally in view of Mansfield et al. (US 6,632,294).

A. The teaching of Wurbs, Parson, McKaveney, each in view of Gros, are detailed above.

B. None of these references expressly teaches the claimed cerium pretreatment.

C. Mansfield teaches that metal substrates may be coated with cerium so as to impart a protective, impermeable coating thereto [3:45-4:20].

D. It would have been obvious to one skilled in the art to pre-treat with cerium. One skilled in the art would have been motivated to do so by the desire and expectation of imparting further protection to the metal surface.

15. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wurbs, Parson, or McKaveney, each in view of Gros.

A. The teaching of these references are detailed above.

B. None of these references teach the particular substrate or magnesium flake recited in these claims.

C. It is the Primary Examiner's position that, because none of the cited references are expressly limited to one particular substrate type or configuration, it would have been obvious to one of ordinary skill in the art to modify the process of any one of these references to coat the claimed surface with the expectation of similar results: imparting corrosion protection thereto. Additionally,

it the Primary Examiner's position that it would have been obvious to modify the process of any one of the claimed references so as to utilize any suitable form of the magnesium powder, including magnesium flake, with the expectation of similar results: imparting corrosion protection to the substrate.

### ***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1-3, 5-8, and 17-20, are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 15-19, 20, 23, 25, 51, and 63-66 of copending Application No. 11/992,112. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the copending claims is fully encompassed by the subject matter of the instant claims such that in performing the process of the copending claims one necessarily performs the process of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Allowable Subject Matter***

18. Claims 21-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. The following is a statement of reasons for the indication of allowable subject matter: The prior art neither teaches nor suggests the additional compositional limitations of these claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Monday through Friday, 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Phillip Fletcher III/  
Primary Examiner, Art Unit 1715

5 November 2010